

Explanation of 2010 Proposed Amendment to the

Gila County Floodplain Management Ordinance

Overview

Changes are being proposed to the Gila County Floodplain Management Ordinance. This document explains the proposed changes and their effects.

First, a sketch showing the parts of the floodplain, and an annotated example flood map are presented. This should help to help clarify some of the terminology used in Gila County's Floodplain Management Ordinance.

Next, a brief background of the National Flood Insurance Program is presented. Gila County participates in this program, so flood insurance is available to all residents.

After that, the proposed changes to the existing ordinance are explained, along with reasons for the changes, and some effects of the changes.

PARTS OF A SPECIAL FLOOD HAZARD AREA (100-YEAR FLOODPLAIN)

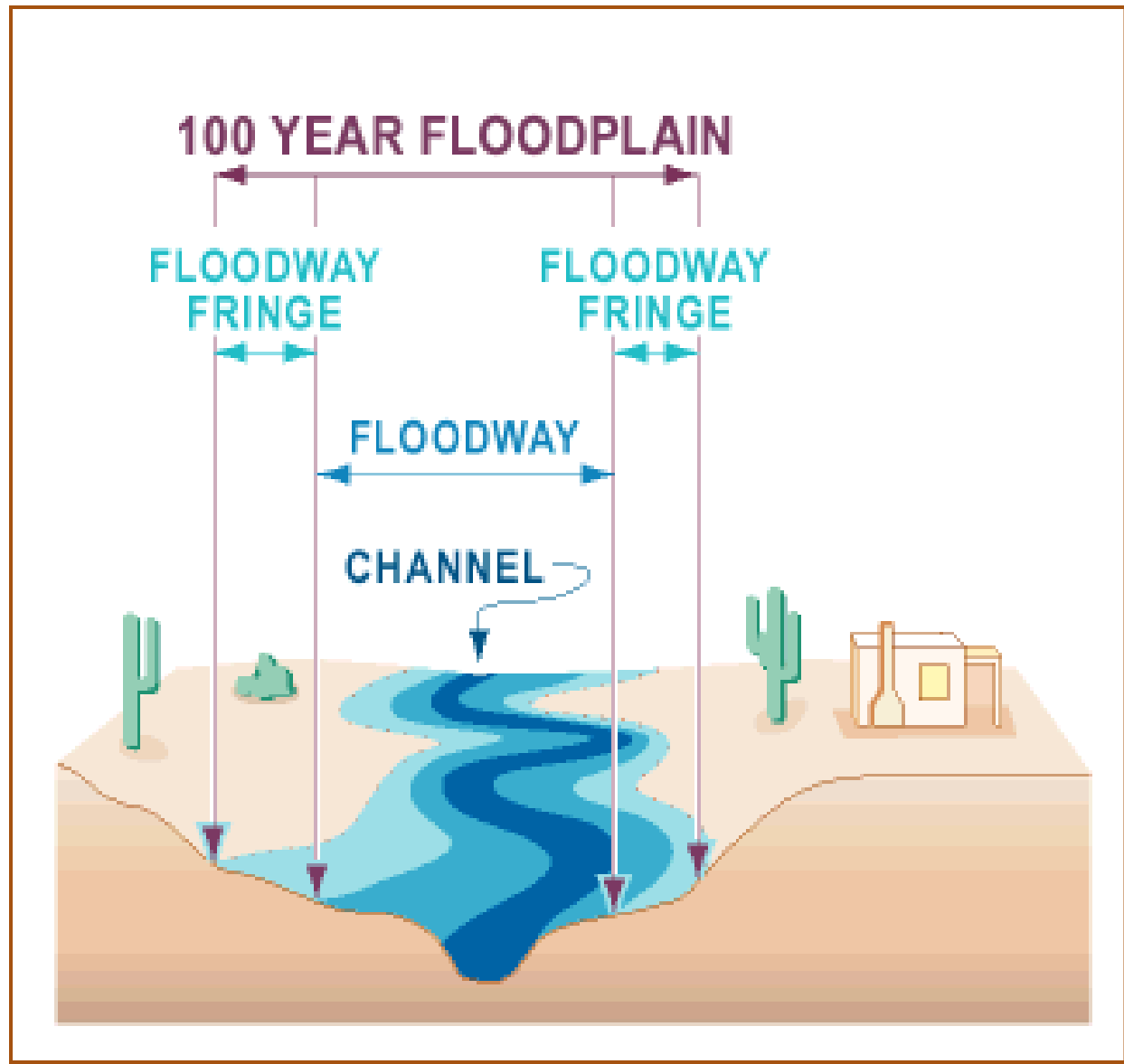


Diagram from Pima County Regional Flood Control District

TOWN OF PAYSON

100-yr Floodplain

Flood Zone A (no floodway or elevations)

Flood Zone X (outside of 500-yr floodplain)

100-yr Floodplain

Flood Zone AE (detailed study, floodway & elevations)

Floodway (cross-hatch area)

Floodway Fringe

"Shaded" Flood Zone X (500-yr floodplain)

EXAMPLE FLOOD MAP

NFP

PANEL 0427D

FIRM

FLOOD INSURANCE RATE MAP

GILA COUNTY, ARIZONA

AND INCORPORATED AREAS

PANEL 427 OF 2595

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
GILA COUNTY	040208	0427	D
UNINCORPORATED AREAS	040107	0427	D
TOWN OF PAYSON			

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
04007C0427D

EFFECTIVE DATE
DECEMBER 04, 2007

Federal Emergency Management Agency

Explanation of 2010 Proposed Amendment to the

Gila County Floodplain Management Ordinance

Why do we have floodplain regulations?

A historical background will help to clarify why we have floodplain regulations:

1. In the 1920s, the insurance industry concluded that flood insurance could not be a profitable venture because the only people who want flood coverage would be those who lived in floodplains. Since they were sure to be flooded, the rates would be too high to attract customers. There was very little other assistance to help flood victims.
2. In the 1960s, Congress was concerned about problems with traditional methods of dealing with flood problems, the construction of massive levee and dam systems with federal assistance, which was becoming extremely costly.
3. In 1968, Congress passed the National Flood Insurance Act and created the National Flood Insurance Program (NFIP) with the following goals:
 - transfer costs of private property flood losses from taxpayers to floodplain property owners through flood insurance premiums.
 - Provide floodplain residents with financial aid after floods, especially smaller floods where federal disaster aid is not available.
 - Guide development away from flood hazard areas.
 - Require that new and substantially improved buildings be built so as to minimize or prevent flood damage.
4. Congress later passes the Flood Disaster Protection Act of 1973, which required that buildings in identified flood hazard areas be required to have flood insurance as a condition of federal aid or loans from federally-insured lenders, and as a condition for receiving federal disaster assistance. Flood insurance is not available to residents unless the County participates in the National Flood Insurance Program, and enforces the flood protection standards for development within floodplains as outlined in the federal regulations.
5. In Arizona Revised Statutes 48-3603.D, the State of Arizona also requires that the County adopt and enforce floodplain regulations.

In order to carry out Congress' goals, certain sanctions are imposed if a community (City, Town, County, etc.) does not join the NFIP, has withdrawn from the program, or is suspended from the program. In such a situation, the following federal assistance is not available:

- No resident will be able to purchase a flood insurance policy
- Existing flood insurance policies will not be renewed
- No federal grants or loans for development in flood hazard areas (by HUD, EPA, SBA, etc)
- No federal disaster assistance to repair flood damaged buildings in a floodplain
- No federal mortgage insurance or loan guarantees in floodplains (FHA, VA, and others)
- Federally-insured or regulated lending institutions must notify applicants that there is a flood hazard and that the property is not eligible for federal disaster relief.

What about the wishes of property owners?

There is resistance, from some Gila County residents, to the regulations which require that development be constructed in a manner that minimizes flood damage. Some of the objections are the following:

- There are time delays to incorporate changes to reduce flood damage
- There are costs involved in less-conventional construction techniques
- In some situations, engineering costs may need to be incurred to determine a design which is safe, and which does not make flooding worse for neighbors.
- There is a perception of being "singled out" to have regulations applied to them and not to their neighbors. This is often the case where neighbors had built prior to the floodplain regulations being in effect, or prior to a flood hazard area being identified by FEMA in their neighborhood.

These are all valid concerns. However, the taxpayers also expect that County Government will ensure that they are safe in a flood.

These residents, and subsequent owners of the property, are safer when buildings are constructed in compliance with the floodplain regulations. In the recent flooding in January of 2010, the homes that were constructed with permits, in compliance with the floodplain regulations, had little or no flood damage to the buildings. However, some other buildings suffered extensive damage, and the flooding posed a hazard to the lives of those residents and to emergency response personnel charged with the public safety. The additional costs of building to the floodplain standards should be compared to the costs of rebuilding (possibly without federal disaster assistance) and to the human life that may be at risk. *County staff have worked hard to streamline the Floodplain Management Ordinance to make it as easy as possible for residents to build safely.*

Why are we proposing to change the Floodplain Management Ordinance?

Since the County is a participating community in the National Flood Insurance Program, we are subject to periodic audits of our performance in enforcing the floodplain regulations. In a recent audit (termed a "Community Assistance Visit" or "CAV") by staff from FEMA Region IX and the Arizona Department of Water Resources, which acts as liaison between the County and FEMA, some provisions of our ordinance were determined to need updating to maintain compliance with current federal and state regulations. Therefore, an ordinance revision was undertaken.

Since the ordinance was being revised, the opportunity was afforded to clarify some ambiguous wording to make it easier for the public to understand what is required. Also some provisions that were added to make compliance easier and less costly, notably by defining some manners of construction that would be acceptable without the expense of having engineering done. These changes were discussed with the state and FEMA to ensure that they would be acceptable. This ordinance provides the minimum degree of regulation possible while still preserving the degree of flood protection mandated by Congress.

What changes are proposed and why?

A. Changes to comply with ADWR and/or FEMA requirements:

1. **Deletion/Change to Section 3.9 Abatement Violations** G.1. – G.4. deleted.
 - Explanation: The "Certificate of Apparent Compliance," a form of permit for work done initially without going through the permit process, is being deleted at the request of ADWR.
2. **Addition to Section 4.2 Designation of the Floodplain Administrator.**
 - Explanation: This amendment clarifies the process for delegating floodplain responsibilities to other staff besides the floodplain administrator, and is being changed at the request of ADWR.
3. **Addition/Change to Section 4.3 Duties and Responsibilities of the Floodplain Administrator** D.1. – D.5., E.3., I., J.
 - Explanation: These changes are being done at the request of ADWR to correspond to language in FEMA's regulations.
4. **Addition/Deletion/Change to Section 5.2 Standards of Construction** C., D., E.
 - Explanation of "wet-floodproofing": Since it is not always easy to raise a garage floor, it is allowed to place openings ("flood vents") in the walls to allow water pressure to equalize on both sides of the wall and protect the walls from collapsing from water pressure against them. The walls are constructed of materials not easily damaged by flooding, up to the flood level, and only parking and limited storage is allowed.
 - Explanation of changes: The FEMA requirements that wet-floodproofed buildings constructed below the flood elevation be constructed of flood resistant materials below the regulatory flood elevation, and for providing certification upon completion, are added into the Ordinance.
5. **Addition/Change to Section 6.3 Conditions for Variances** F.
 - Explanation: The reporting of these variance to ADWR is also required, by ADWR. A clarification is also added that the FEMA Elevation Certificate is still required to certify the actual floor elevation, and the size and location of the flood vents used for wet floodproofing.

B. Additions/Changes to Definitions

These changes are being proposed in order to make it easier for people to understand exactly what is required, and to be specific in order to minimize differences in the interpretation of the ordinance.

2. **Accessory Structure**, This definition now makes reference to where it is used in the Ordinance. The threshold size before a variance is required in order to "wet-floodproof" a building in lieu of elevating the floor is raised from 500 to 600 square feet, making the permit process a little quicker for detached garages up to 600 square feet.
 - Explanation: Since it is not always easy to raise a garage floor, it is allowed to place openings ("flood vents") in the walls to allow water pressure to equalize on both sides of the wall and protect the walls from collapsing from water pressure against them. The walls are constructed of materials not easily damaged by flooding, up to the flood level, and only parking and limited storage is allowed. Without this change, only smaller garages could be issued a permit without a variance.
3. **Flood Insurance Study**, corrected a FEMA map title in the definition.
4. **Flood-Resistant Materials**, provides a definition to avoid ambiguity in application of the regulations.
 - Explanation: This helps people understand the requirements when planning their projects. Flood resistant materials applies when flood vents are used (such as in garages with floors below the flood elevation). Without this change, there would be more confusion about what construction materials are needed.
5. **Small Accessory Building (Accessory Building changed to Enclosure)**, This terminology is changed to avoid confusion with "Accessory Building" definition, and to broaden the previous scope of the term.
 - Explanation: A "small enclosure" would now include not just sheds, but small fenced patios, dog runs, etc. These small enclosures are proposed to be allowed in a floodway without the extensive engineering costs which would otherwise be needed to show that these items comply with the floodway requirements.
6. **Substantial Damage**, the definition in the Ordinance is changed at FEMA's request, to include the procedure for calculation of substantial damage and substantial improvements in the ordinance. This procedure is already being used, and is per a computation form that was approved by FEMA several years ago. The substantial damage or substantial improvement calculations are mainly used to justify exemptions to some of the FEMA floor elevation requirements for minor improvements and additions.
 - Explanation: There is no change to the existing FEMA-approved calculation method.
7. **Substantial Improvement**, the reasons for the change are the same as for substantial damage.
 - Explanation: There is no change to the existing FEMA-approved calculation method.
8. **Waste Disposal System**, is a new definition. Section 5.4.C prohibits "waste disposal systems" in a floodway, based on ARS 49-3609.C, but the term "waste disposal system" is not defined in either place. The state statute also does not allow the County to grant a variance to that provision. This is a state requirement, not a federal requirement. This proposed definition allows highly treated effluent to be considered a resource rather than waste. This has the effect of allowing building on floodway lots (subject to meeting the floodway development criteria in the Ordinance) if an alternative wastewater treatment system is installed which meets the water quality criteria, in lieu of a standard septic system. It also allows alternative treatment systems to be installed to replace existing septic systems to improve water quality in our creeks. This definition was developed in conjunction with the County Wastewater Department, and has been reviewed by the Arizona Department of Water Resources.
 - Explanation: The Floodplain Management Ordinance does not have anything to do with wastewater systems, other than to mirror this state statute. To assist the Community Development Division's Wastewater Department to better serve the public, a definition of waste disposal system is being proposed in this ordinance, to meet the goals of the state statute in maintaining water quality in our creeks, but to also provide a means whereby people can build on lots located within floodways.

C. Clarification of wording:

These are wording changes to clarify ambiguities and make the requirements easier to understand. The requirements are substantially the same as before, except as noted elsewhere:

1. **Addition/Deletion to Section 3.10 Civil Penalties A., C.**

- Explanation: The Hearing Officer procedures were finalized and adopted after the last floodplain ordinance revision. These modifications reference the hearing officer ordinance, instead of repeating the procedure in this ordinance. It also provides for automatic adoption of any revisions to the hearing officer rules and procedures. This avoids confusion about the process.

2. **Change to Section 5.4 Standards for Utilities C.**

- Explanation: Quotes are added around the term "Waste disposal systems" to be consistent with that notation used elsewhere in the Ordinance where a term is defined in Section 2. This alerts the reader that the term has a specific meaning in the ordinance.

3. **Change to Section 5.5 Standards of Subdivisions B. and G.**

- Explanation: Corrects the "floodway" reference to be "floodplain and floodway," since the floodplain is part of the floodway analysis. The wording is also rewritten to clarify the meaning of parts of it.

4. **Addition/Change to Section 6.3 Conditions for Variances F.**

- Explanation: The standard FEMA requirements are clarified for the case where the building is proposed in a floodway, and states that the variance for wet floodproofing in lieu of elevation cannot be issued until the other floodway requirements are also satisfied.

5. **Addition to Section 7.7 Administrative Floodways E.**

- Explanation: A section is added to remove any ambiguity, and lets people install a standard septic system in a floodway, as long as that floodway is NOT shown on an official FEMA map. The state statute on waste disposal systems does not apply to this situation.

6. **Addition of Index.**

- Explanation: This helps to find parts of the ordinance applicable to a specific situation.

D. Changes to reduce costs, reduce delays, or allow more options in construction.

1. Addition/Deletion/Change to Section 5.2 Standards of Construction C., D., E.

- Explanation of first change: There is a non-engineered method that can be used under certain conditions in lieu of engineering to establish a flood elevation where none is given on the FEMA maps, which can result in less cost to comply with the floodplain regulations. This method is consistent with FEMA rules.
- Explanation of second change: The size of a detached accessory building (such as a garage) that can be built below the flood elevation by using flood vents is increased from 500 to 600 square feet. Larger buildings using flood vents in lieu of elevation still require a variance from the Board.

2. Change to Section 5.6 Standards for Manufactured Homes and Manufactured Home Parks and Subdivisions B.1. and B.2.

- Explanation: If an anchoring method other than the standard frame ties or over the top ties in the Ordinance is proposed, engineering is required to show that the anchoring system meets the existing performance specifications. This allows alternative anchoring systems, proposed by some manufacturers, to be used, as long as they are shown to work as well as the traditional ties. This allows more options for property owners.

3. Addition/Deletion to Section 5.9 Flood Related Erosion-Prone Area C., D., E.

- Explanation - reduction of Ordinance's area of jurisdiction: This makes the erosion area of jurisdiction the same as the floodplain area of jurisdiction, i.e., the Ordinance will not regulate erosion if the structure is being built outside of the floodplain, such as on a high bank close to a river. For example, citizens may propose erosion protection as they see fit and at their own risk if the building is outside of the floodplain, and such erosion protection will not be reviewed for adequacy to protect a structure outside of the floodplain, but only for its impact on the floodplain in which it is built.

Explanation - alternative erosion protection measures: This section also allows creative erosion protection for a building, such as footings and piers below the scour depth, with the building bridging between the piers, as an alternative to traditional channel bank lining for protecting a building from damage if a channel bank erodes back to the building.

4. Addition/Change to Section 6.3 Conditions for Variances F.

- Explanation: This allows permits to be issued for the construction of wet-floodproofed garages up to 600 square feet before a variance is required.

5. Addition/Change to Section 7.1 Flood Limits Shown on Subdivision Plats.

- Explanation: One-hundred year flood limits delineated as part of subdivision plats, are only treated as regulatory floodplains (i.e., regulated by this Ordinance) if the drainage area is over 640 acres (1 square mile). This limits the jurisdiction of the ordinance to only larger watercourses with more significant flood hazards, eliminating the need for floodplain use permits for some smaller watercourses.

6. Addition/Deletion/Change to Section 7.4 Determination of Regulatory Flood Elevations A.

- Explanation: This section is for floodplains not on the FEMA maps, such as floodplains adopted as part of subdivision plats, or floodplains determined by flood studies adopted by the Board, but not published on FEMA's maps. This deletes a sentence that does not apply, and adds an option for a non-engineered determination of the flood depth under certain conditions, consistent with the changes proposed in Section 5.2